

AF/2172
JFW

Atty Docket No. 080398.P506

Patent

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES**

In re Application of:) Examiner:	Corrielus, Jean M.
)	
Hawley K. Rising, III) Art Unit:	2172
)	
Serial No. 09/904,449)	
)	
Filed: July 11, 2001)	
)	
For: FORMAL VERIFICATION OF)	
SEMANTIC DS)	
_____)	

Mail Stop Appeal Brief - Patents
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

APPEAL BRIEF UNDER 37 C.F.R. § 41.37

This is an appeal to the Board of Patent Appeals and Interferences from the decision of the Examiner of Group 2172, dated August 23, 2004, in which claims 1-22 in the above-identified application were finally rejected. This Appeal Brief is hereby submitted pursuant to 37 C.F.R. § 41.37(a).

I. REAL PARTY IN INTEREST

The real party in interest is the assignee of the full interest in the invention, Sony Corporation, 7-35 Kitashinagawa 6-Chome, Shinagawa-Ku, Japan, and Sony Electronics, Inc. 1 Sony Drive, Park Ridge, NJ 07656.

03/01/2005 GWORDDF1 00000015 09904449

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II. RELATED APPEALS AND INTERFERENCES

To the best of Appellant's knowledge, there are no appeals or interferences related to the present appeal that will directly affect, be directly affected by, or have a bearing on the Board's decision in the instant appeal.

III. STATUS OF THE CLAIMS

Claims 1-22 are pending in the application and were finally rejected in an Office Action mailed August 23, 2004. A request for reconsideration was denied in an Advisory Action mailed November 22, 2004. Claims 1-22 are the subject of this appeal. A copy of Claims 1-22 as they stand on appeal are set forth in Appendix A.

IV. STATUS OF AMENDMENTS

No amendments to the claims have been made after receipt of the Final Office Action on 1-22.

V. SUMMARY OF CLAIMED SUBJECT MATTER

Appellant's invention as claimed in claims 1-22 classifies, stores and retrieves audiovisual information that describes a piece of multimedia content, referred to as a semantic description of the content. The semantic description describes entities in the content, such as people, events and time, and the relationships among the entities [page 2, ¶17 and page 3, ¶¶22-23]. Thus, entities represent the non-relational portions of the semantic description [page 4, ¶35]. A concept is an abstract of a semantic description used as a template, and is stored in a classification scheme and/or a dictionary of descriptions [page 5, ¶38, page 8, ¶63, and page 11, ¶81]. To instantiate a semantic description for a particular piece of content, a concept is searched for matches between entities and relationships of the content, and a graph is built that links the entity to the concept [page 11, ¶79].

VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

I. Claims 1-22 stand rejected under 35 U.S.C. § 103(a) over the combination of U.S. Patent 5,652,880 to Seagraves and U.S. Patent 5,852,819 to Beller.

VII. ARGUMENTS

I. Claims 1-22 are patentable under 35 U.S.C. § 103(a) over the combination of Seagraves and Beller.

Seagraves discloses using codified linkages between related objects in a database for querying and presenting such objects, their linkages and data concerning the linkages. The object data and linkages are grouped together in an outline format so the querying is referred to as "Query-By-Outline." The object data is textual in nature.

Beller discloses determining data patterns by analyzing data from various types of databases. The patterns are presented to user through statistical or graphical representations. Beller also states that visual or audible signals, such a series of words, can be used to describe the meaning of a piece of data.

A. Claims 1-3 and 12-14

Claims 1-3 and 12-14 stand or fall together. Claim 1 is the representative claim and claims using an entity describing a non-relational part of a semantic description of audiovisual information, and a concept comprising a collection of properties of the audiovisual information to produce a description of the audiovisual information in the form of a graph.

The Examiner is equating Seagraves' inventory of objects with Appellant's claimed concept, and Seagraves' outline presentation format with Appellant's claimed graph. The Examiner admits that Seagraves does not disclose an entity that describes a portion of a semantic description or a concept that is a collection of properties of audiovisual information as claimed by Appellant, but asserts that Beller does so.

The Examiner asserts that Beller's use of visual or auditory signal is equivalent to Appellant's claimed entity that describes a non-relational part of a semantic description. However, Beller teaches that the audiovisual data is a semantic description of an entity, NOT that the entity is a semantic description of audiovisual data. In contrast, Appellant

claims an entity that describes a part of a semantic description. Thus, there is no support in Beller for the Examiner's asserted equivalence.

The Examiner also asserts that column 22, lines 25-32 of Beller discloses Appellant's claimed entity and claimed concept:

Note that even though only OLAPs, AI programs, and statistics programs are indicated in FIG. 7 at step 707, any current or future technology that accesses data from databases, analyzes and/or organizes them, and produces information suitable for inclusion in the DIF 154 may be utilized at this step in the present invention. Note also that these data and information analysis routines can also be utilized to generate "factor profiles" which indicate correlated groupings of data via factor analysis and similar statistical procedures and can be used to reduce complex data into a smaller number of meaningful concepts.

Appellant respectfully submits that one of skill in the art would not interpret the above disclosure in Beller as teaching or even suggesting Appellant's claimed entity that describes a non-relational part of a semantic description, or Appellant's claimed concept that is a collection of properties of audiovisual information. Furthermore, Appellant respectfully submits that Beller as a whole contains no disclosure related to semantic descriptions of audiovisual information as the term is commonly understood in the art. Thus, Beller fails to teach or suggest either of the claimed limitations that the Examiner admits are missing in Seagraves.

In addition, Appellant respectfully submits that the combination of Seagraves and Beller is improperly motivated. The Examiner stated the motivation for the combination of Seagraves and Beller is to give Seagraves the ability to describe concepts and non-relational parts of a semantic description of audiovisual information. There is nothing in Seagraves that suggests any advantage to be found in modifying Seagraves's invention as asserted by the Examiner. In addition, there is nothing in Beller that can be properly interpreted as providing the necessary motivation because Beller does not disclose semantic descriptions of audiovisual information.

Appellant pointed out these deficiencies to the Examiner in Appellant's request for reconsideration to the Final Office Action. In the Advisory Action, the Examiner reasserted his previous rejection. However, the Examiner also stated that the Appellant admitted that semantic descriptions of audiovisual information were known and therefore the previous rejection was moot. Appellant interprets this statement to mean that even

though the combination of Seagraves and Beller does not teach all Appellant's claim limitations, the fact that semantic descriptions were known in the art renders the claimed invention obvious.

Appellant strenuously objects to the Examiner's statements in the Advisory Action. Appellant has never attempted to hide the prior art from the Examiner. In fact, the Background Section of the Specification contains definitions of the terms at issue. Appellant respectfully submits that Appellant is not claiming semantic descriptions alone, but the creation of such descriptions using techniques not disclosed in the prior art. The Examiner has cited no evidence, other than the inapplicable Beller reference, that would motivate one of skill in the art to make the modifications urged by the Examiner. The mere fact that semantic descriptions are known does not suggest the desirability of such modifications.

Thus, the Examiner has not established a *prima facie* case of obviousness for claim 1. Accordingly, Appellant respectfully requests the Board instruct the Examiner to withdraw the rejection of claims 1-3 and 12-14 under 35 U.S.C. § 103(a) over the combination of Seagraves and Beller.

B. Claims 4-6 and 15-17

Claims 4-6 and 15-17 stand or fall together. Claim 4 is the representative claim. Claim 4 claims entities and concepts in the same terms as claim 1. In addition, claim 4 claims referencing an interior structure of the concept from all entities to describe an arbitrary structure related to the audiovideo information.

The Examiner is relying on column 22, lines 25-32 of Beller (cited above) as disclosing the claimed arbitrary structure. Appellant respectfully submits that there is no teaching or suggestion in the cited section, or in Beller as a whole, of an arbitrary structure related to audiovideo information. Furthermore, Appellant respectfully submits again that the combination of Seagraves and Beller is improperly motivated as stated above.

Thus, the Examiner has failed to state a proper *prima facie* case of obviousness for claim 4. Accordingly, Appellant respectfully requests the Board instruct the

Examiner to withdraw the rejection of claims 4-6 and 15-17 under 35 U.S.C. § 103(a) over the combination of Seagraves and Beller.

C. Claims 7, 10, 11, 18, 21 and 22

Claims 7, 11, 10, 18, 21 and 22 stand or fall together. Claim 7 is the representative claim and claims linking entities within a semantic description to corresponding properties in a concept that characterize the semantics of the audiovisual information.

The Examiner asserts that Seagraves discloses linking entities within the semantic description to properties in the concept. Given that the Examiner is equating Seagraves' objects in an inventory to Appellant's claimed properties in a concept, it appears that Examiner is interpreting the textual descriptions of the objects in Seagraves' inventory as equivalent to the claimed semantic description. However, Seagraves does not teach or suggest that any portions of the textual descriptions are linked to the objects in the inventory. Instead, the textual description are merely class and subclass titles.

Furthermore, the Examiner is citing column 22, lines 25-32 of Beller as disclosing Appellant's claimed properties with a concept that characterize semantics. Appellant respectfully submits that the cited section of Beller neither teaches nor suggests the claimed limitation, and that Beller as a whole fails to do so as well. In addition, Appellant once again respectfully submits that the combination of Seagraves and Beller is improperly motivated as stated above.

Thus, the Examiner has failed to state a proper *prima facie* case of obviousness for claim 7. Accordingly, Appellant respectfully requests the Board instruct the Examiner to withdraw the rejection of claims 7, 10, 11, 18, 21 and 22 under 35 U.S.C. § 103(a) over the combination of Seagraves and Beller.

D. Claims 8, 9, 19 and 20

Claims 8, 9, 19 and 20 stand or fall together. Claims 8 and 9 depend from independent 7, and claims 19 and 20 depend from independent claim 18. Claim 8 is the representative claim and claims the controlling of instantiation of a term in the semantic description with the concept.

The Examiner asserts that Seagraves discloses the claimed limitation of controlling instantiation of a semantic description term. Given that the Examiner is equating Seagraves' objects in an inventory to Appellant's claimed properties in a concept, and titles of classes and subclasses as Appellant's claimed semantic descriptions, Appellant can find no teaching in Seagraves that even suggest that the titles can be instantiated, much less that the instantiation of a title is controlled by the inventory. In addition, Appellant once again respectfully submits that the combination of Seagraves and Beller is improperly motivated as stated above.

Thus, the Examiner has failed to state a proper *prima facie* case of obviousness for claim 7. Accordingly, Appellant respectfully requests the Board instruct the Examiner to withdraw the rejection of claims 8, 9, 19 and 20 under 35 U.S.C. § 103(a) over the combination of Seagraves and Beller.

VIII. CONCLUSION

Because the combination of Seagraves and Beller is improperly motivated and also does not teach or suggest Appellant's invention as claimed in claims 1-22, Appellant respectfully requests the Board reverse the rejections of claims 1-22 under 35 U.S.C. § 103(a) and direct the Examiner to enter a Notice of Allowance for claims 1-22.

Fee for Filing a Brief in Support of Appeal

Enclosed is a check in the amount of \$ 500 to cover the fee for filing a brief in support of an appeal as required under 37 C.F.R. §§ 1.17(c) and 41.37(a).

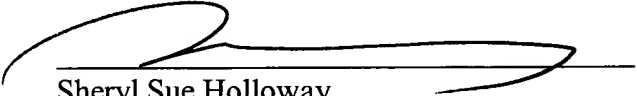
Deposit Account Authorization

Authorization is hereby given to charge our Deposit Account No. 02-2666 for any charges that may be due. Furthermore, if an extension is required, then Appellant hereby requests such extension.

Respectfully submitted,

BLAKELY, SOKOLOFF, TAYLOR
& ZAFMAN LLP

Dated: FEB. 25, 2005



Sheryl Sue Holloway
Attorney for Appellant
Registration No. 37,850

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**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
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In re Application of:)	Examiner:	Corrielus, Jean M.
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Hawley K. Rising, III)	Art Unit:	2172
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Serial No. 09/904,449)		
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Filed: July 11, 2001)		
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For: FORMAL VERIFICATION OF)		
SEMANTIC DS)		
_____)		

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**APPENDIX A FOR
APPEAL BRIEF UNDER 37 C.F.R. § 41.37**

1. (Previously presented) A method of permitting description of audiovisual information, the method comprising:

determining a match for an entity in a concept, wherein the entity describes a non-relational part of a semantic description, and the concept is a collection of properties of the audiovisual information;

determining a match for a relationship the entity has with the concept; and

building a graph that links the entity to a portion of the concept to produce the description of the audiovisual information.

2. (Previously presented) The method of claim 1 further comprising:

storing an abstract of the description for use as a template.

3. (Previously presented) The method of claim 1 further comprising:
storing the abstract in at least one of a classification scheme and a dictionary.
4. (Previously presented) A method for use in classifying, storage and retrieval of audiovisual information, the method comprising:
providing entities describing non-relational parts of a semantic description, the entities including a concept having a collection of properties of the audiovisual information; and
referencing an interior structure of the concept from all entities in the semantic description to describe an arbitrary structure related to the audiovisual information.
5. (Previously presented) The method of claim 4 further comprising:
augmenting a description field in at least one of a classification scheme and a dictionary of descriptions to allow description of a term by employing the concept.
6. (Previously presented) The method of claim 4 further comprising:
construing a link between the entities as at least one of a classification scheme and a dictionary for storage.
7. (Previously presented) A method of instantiating a semantic description of audiovisual information from a concept, the method comprising:
logically linking entities within the semantic description to corresponding properties in the concept, the properties characterizing semantics of the audiovisual information.
8. (Previously presented) The method of claim 7, wherein logically linking the entities comprises:
controlling instantiation of a term in the semantic description with the concept.
9. (Previously presented) The method of claim 8, wherein a reference to the term retrieves the concept.

10. (Previously presented) The method of claim 7, wherein logically linking the entities comprises:

creating links between the entities in accordance with an list of acceptable relationships.

11. (Previously presented) The method of claim 7, wherein the entities describe non-relational elements of the semantic description.

12. (Previously presented) A computer-readable medium having executable instructions to cause a computer to perform a method of permitting description of audiovisual information the method comprising:

determining a match for an entity in a concept, wherein the entity describes a non-relational part of a semantic description, and the concept is a collection of properties of the audiovisual information;

determining a match for a relationship the entity has with the concept; and

building a graph that links the entity to a portion of the concept to produce a description of the audiovisual information.

13. (Previously presented) The computer-readable medium of claim 12, wherein the method further comprises:

storing an abstract of the description for use as a template.

14. (Previously presented) The computer-readable medium of claim 12, wherein the method further comprises:

storing the abstract in at least one of a classification scheme and a dictionary.

15. (Previously presented) A computer-readable medium having executable instructions to cause a computer to perform a method of use in classifying, storage and retrieval of audiovisual information, the method using the elements of a semantic description to

describe an arbitrary structure related to the audiovisual information, the method comprising:

providing entities describing non-relational parts of a semantic description, the entities including a concept having a collection of properties of the audiovisual information; and

referencing an interior structure of the concept from all entities in the semantic description to describe an arbitrary structure related to the audiovisual information.

16. (Previously presented) The computer-readable medium of claim 15, wherein the method further comprises:

augmenting a description field in at least one of a classification scheme and dictionary of descriptions to allow description of a term by employing the concept.

17. (Previously presented) The computer-readable medium of claim 15, wherein the method further comprises:

construing link between the entities as at least one of a classification scheme and a dictionary for storage.

18. (Previously presented) A computer-readable medium having executable instructions to cause a computer to perform a method of instantiating a semantic description of audiovisual information from a concept, the method comprising:

logically linking entities within the semantic description to corresponding properties in the concept, the properties characterizing semantics of the audiovisual information.

19. (Previously presented) The computer-readable medium of claim 18, wherein logically linking the entities comprises:

controlling instantiation of a term in the semantic description with the concept.

20. (Previously presented) The computer-readable medium of claim 19, wherein a reference to the term retrieves the concept.

21. (Previously presented) The computer-readable medium of claim 18, wherein logically linking the entities comprises:

creating links between the entities in accordance with an list of acceptable relationships.

22. (Previously presented) The computer-readable medium of claim 18, wherein the entities describe non-relational elements of the semantic description.

**FEE TRANSMITTAL FOR FY 2005**

Effective on 12/08/2004. Fees pursuant to the Consolidated Appropriations Act, 2005 (H.R. 4818).

TOTAL AMOUNT OF PAYMENT (\$) 500.00

Complete if Known:

Application No. 09/904,449
Filing Date 7/11/01
First Named Inventor Rising III
Examiner Name Corrielus, J.
Art Unit 2172
Attorney Docket No. 80398.P506

 Applicant claims small entity status. See 37 CFR 1.27.**METHOD OF PAYMENT** (check all that apply)☒ Check ☐ Credit Card ☐ Money Order ☐ None ☐ Other (please identify) Deposit AccountDeposit Account Number : 02-2666Deposit Account Name: ☒ The Director is Authorized to do the following with respect to the above-identified Deposit Account:☐ Charge fee(s) indicated below.☒ Charge any additional fee(s) or underpayment of fee(s) during the pendency of this application.☐ Charge fee(s) indicated below except for the filing fee☒ Credit any overpayments.☒ Any concurrent or future reply that requires a petition for extension of time should be treated as incorporating an appropriate petition for extension of time and all required fees should be charged.

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Provide credit card information and authorization on PTO-2038.

FEE CALCULATION**1. BASIC FILING, SEARCH, AND EXAMINATION FEES**

Large Entity		Small Entity		Fee Description		Fees Paid (\$)
Fee Code	Fee (\$)	Fee Code	Fee (\$)			
1011	300	2011	150	Utility application filing fee	} 1,000/500	_____
1111	500	2111	250	Utility search fee		_____
1311	200	2311	100	Utility examination fee		_____
1012	200	2012	100	Design application filing fee	} 430/215	_____
1112	100	2112	50	Design search fee		_____
1312	130	2312	65	Design examination fee		_____
1013	200	2013	100	Plant filing fee	} 660/330	_____
1113	300	2113	150	Plant search fee		_____
1313	160	2313	80	Plant examination fee		_____
1004	300	2004	150	Reissue filing fee	} 1,400/700	_____
1114	500	2114	250	Reissue search fee		_____
1314	600	2314	300	Reissue examination fee		_____
1005	200	2005	100	Provisional application filing fee		_____
SUBTOTAL (1) \$						<u>0</u>

2. EXCESS CLAIM FEES

	<u>Extra Claims</u>	<u>Fee from below</u>	<u>Fees Paid (\$)</u>
Total Claims _____ - 20 or HP = _____		X _____	= _____
HP = highest number of total claims paid for, if greater than 20			
Independent Claims _____ - 3 or HP = _____		X _____	= _____
HP = highest number of independent claims paid for, if greater than 3			
Multiple Dependent Claims _____		_____	= _____

<u>Large Entity</u>		<u>Small Entity</u>		<u>Fee Description</u>
<u>Fee</u>	<u>Fee</u>	<u>Fee</u>	<u>Fee</u>	
<u>Code</u>	<u>(\$)</u>	<u>Code</u>	<u>(\$)</u>	
1202	50	2202	25	Each claim over 20
1201	200	2201	100	Each independent claim over 3
1203	360	2203	180	Multiple dependent claims, if not paid
1204	200	2204	100	Reissue: each claim over 20 and more than in the original patent
1205	50	2205	25	Reissue: each independent claim more than in the original patent

SUBTOTAL (2) \$ 0**3. APPLICATION SIZE FEE**

If the specification and drawings exceed 100 sheets of paper, the application size fee due is \$250 (\$125 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).

<u>Total Sheets</u>	<u>Extra Sheets</u>	<u>Number of each add'l 50 or fraction thereof</u>	<u>Fee from below</u>	<u>Fees paid (\$)</u>
_____	- 100 = _____	/ 50 = _____ (round up to whole number)	X _____	_____

<u>Large Entity</u>		<u>Small Entity</u>		<u>Fee Description</u>
<u>Fee</u>	<u>Fee</u>	<u>Fee</u>	<u>Fee</u>	
<u>Code</u>	<u>(\$)</u>	<u>Code</u>	<u>(\$)</u>	
1081	250	2081	125	Utility
1082	250	2082	125	Design
1083	250	2083	125	Plant
1084	250	2084	125	Reissue

SUBTOTAL (3) \$ 0

FEE CALCULATION (continued)**4. OTHER FEE(S)**

				Fees Paid (\$)	
Non-English Specification, \$130 fee (no small entity discount)					
<u>Large Entity</u>		<u>Small Entity</u>			
Fee Code	Fee (\$)	Fee Code	Fee (\$)	Fee Description	
1051	130	2051	65	Surcharge - late filing fee or oath	
1052	50	2052	25	Surcharge - late provisional filing fee or cover sheet	
1053	130	1053	130	Non-English specification	
1812	2,520	1812	2,520	For filing a request for ex parte reexamination	
1813	8,800	1813	8,800	Request for inter parties reexamination	
1804	920*	1804	920*	Requesting publication of SIR prior to Examiner action	
1805	1,840*	1805	1,840*	Requesting publication of SIR after Examiner action	
1251	120	2251	60	Extension for reply within first month	
1252	450	2252	225	Extension for reply within second month	
1253	1,020	2253	510	Extension for reply within third month	
1254	1,590	2254	795	Extension for reply within fourth month	
1255	2,160	2255	1,080	Extension for reply within fifth month	
1401	500	2401	250	Notice of Appeal	
1402	500	2402	250	Filing a brief in support of an appeal	500.00
1403	1,000	2403	500	Request for oral hearing	
1451	1,510	1451	1,510	Petition to institute a public use proceeding	
1452	500	2452	250	Petition to revive - unavoidable	
1453	1,500	2453	750	Petition to revive - unintentional	
1501	1,400	2501	700	Utility issue fee (or reissue)	
1502	800	2502	400	Design issue fee	
1503	1100	2503	550	Plant issue fee	
1462	400	1462	400	Petitions to the Commissioner (CFR 1.17(f) Group I)	
1463	200	1463	200	Petitions to the Commissioner (CFR 1.17(g) Group II)	
1464	130	1464	130	Petitions to the Commissioner (CFR 1.17(h) Group III)	
1807	50	1807	50	Processing fee under 37 CFR 1.17(q)	
1806	180	1806	180	Submission of Information Disclosure Stmt	
8021	40	8021	40	Recording each patent assignment per property (times number of properties)	
1809	790	2809	395	For filing a submission after final rejection (see 37 CFR 1.129(a))	
1814	130	2814	65	Statutory Disclaimer	
1810	790	2810	395	For each additional invention to be examined (see 37 CFR 1.129(b))	
1801	790	2801	395	Request for Continued Examination (RCE)	
1802	900	1802	900	Request for expedited examination of a design application	
1504	300	1504	300	Publication fee for early, voluntary, or normal pub.	
1505	300	1505	300	Publication fee for republication	
1803	130	1803	130	Request for voluntary publication or republication	
1808	130	1808	130	Processing fee under 37 CFR 1.17(i) (except provisionals)	
1454	1,370	1454	1,370	Acceptance of unintentionally delayed claim for priority	
Other fee (specify) _____					
Other fee (specify) _____					
				SUBTOTAL (4)	\$ 500.00

*Reduced by Basic Filing Fee Paid

SUBMITTED BY:Typed or Printed Name: Sheryl Sue HollowaySignature: Date: FEB. 23, 2005Reg. Number: 37,850Telephone Number: 408-720-8300

Send to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450